

CLAIMS

What is claimed is:

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1. A film comprising:

a biodegradable polymer; and
a water soluble polymer,

wherein the film is breathable and has a water vapor
transmission rate greater than about $500 \text{ g/m}^2/24\text{hrs}$.

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2. The film of Claim 1, wherein the biodegradable
polymer is an aliphatic polyester.

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3. The film of Claim 1, wherein the biodegradable
polymer is selected from the group consisting of polycaprolactone,
polybutylene succinate, poly(butylene succinate-adipate),
polylactic acid, terpolymers of terephthalic acid, adipic acid, and
1,4-butanediol, and copolymers and mixtures thereof.

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4. The film of Claim 1, wherein the water soluble
polymer is selected from the group consisting of polyethylene
oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and
mixtures thereof.

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5. The film of Claim 1, wherein the water soluble
polymer is polyethylene oxide, polyethylene glycol or a copolymer
thereof.

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6. The film of Claim 1 having a water vapor
transmission rate greater than about $1000 \text{ g/m}^2/24\text{hrs}$.

7. The film of Claim 1 having a water vapor
transmission rate greater than about $1500 \text{ g/m}^2/24 \text{ hrs}$.

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8. The film of Claim 1, wherein the film includes
from about 30% to about 95% biodegradable polymer by weight of
the film.

9. The film of Claim 1, wherein the film includes from about 50% to about 75% biodegradable polymer by weight of the film.

10. The film of Claim 1, wherein the film includes from about 5% to about 70% water soluble polymer by weight of the film.

11. The film of Claim 1, wherein the film includes from about 15% to about 50% water soluble polymer by weight of the film.

12. The film of Claim 1 having an elongation at break of greater than about 350%.

13. The film of Claim 1 having an elongation at break of greater than about 450%.

14. The film of Claim 1 having a thickness of from about 0.01 to about 5 mils.

15. The film of Claim 1 having a thickness of from about 0.01 to about 2 mils.

16. The film of Claim 1, wherein the biodegradable polymer is polycaprolactone and the water soluble polymer is polyethylene oxide.

17. ~~The film of Claim 1, wherein the film is a precursor film.~~

18. The film of Claim 1, wherein the film is biodegradable.

19. The film of Claim 18 having a water vapor transmission rate of greater than about 2500 g/m²/24hrs.

20. The film of Claim 18 having a water vapor transmission rate of greater than about 3000 g/m²/24hrs.

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21. The film of Claim 18 having a water vapor transmission rate of greater than about 3500 g/m²/24hrs.

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22. ~~The film of Claim 18 having an elongation at break of greater than about 100%.~~

23. The film of Claim 18 having an elongation at break of greater than about 200%.

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24. The film of Claim 18, wherein the film includes from about 1% to about 50% water soluble polymer by weight of the film.

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25. The film of Claim 18, wherein the film includes from about 5% to about 30% water soluble polymer by weight of the film.

26. The film of Claim 18, wherein the film includes from about 50% to about 99% biodegradable polymer by weight of the film.

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27. The film of Claim 18, wherein the film includes from about 70% to about 95% biodegradable polymer by weight of the film.

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28. The film of Claim 18 having a thickness of from about 0.01 to about 5 mils.

29. The film of Claim 18 having a thickness of from about 0.01 to about 5 mils.

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